

regardless of whether any or all of these conditions are met. Even under conditions of pure monopoly, pricing flexibility *within a zone of reasonableness* can be expected to improve economic efficiency. It is all the more valuable if the Commission is politically unable to achieve efficient pricing through more direct means (*viz.*, SLC increases). And arguments about monopoly are essentially mooted by the requirement of unbundled element offerings priced at cost.

Requiring the Phase 1 conditions may be defensible with respect to long-term prices or contracts. Competition may be deterred, if such deals are consummated before competitors are able to offer service. However, efficient competition cannot be foreclosed as a result of geographic deaveraging or volume discounts (to end users) — so long as prices remain within the range of reasonableness. The Commission should immediately afford flexibility to deaverage rates and offer volume discounts and not delay until the Phase 1 conditions are met.

We understand that the Commission may wish to afford incentives for LECs to facilitate interconnection of competing local exchange carriers. However, such incentives may be unnecessary here. LECs are required by the Act to meet most of the conditions proposed in the *Notice*. In addition, the RBOCs already have incentives to facilitate interconnection in order to meet the check list for entry into the interLATA market.

Specifying conditions for pricing flexibility entails significant costs. It creates regulatory barriers to the achievement of economic efficiency. Interested parties that benefit from inefficient LEC pricing can be expected to use the resulting regulatory process (to determine whether the conditions have been met) strategically to maximize regulatory delays. This type of outcome is best avoided by setting up regulatory processes only where the processes are really necessary to prevent abuse. It is far from clear that establishing a new layer of regulatory process is necessary to ensure that the Phase 1 conditions are met on a timely basis.

## **VIII. Conclusion**

The problem is growing and the clock is ticking. Current access prices recover large amounts of NTS, legacy and subsidy costs. Subsidy costs may become larger as additional universal public services are mandated. Failure to recover legacy costs will have controversial consequences and send unfortunate signals. At the same time, there is feverish competitive activity and regulatory

policy is striving mightily to promote more competition. In this environment, it is critical that real thoroughgoing reforms be adopted and implemented in a timely and prudent fashion.

We think a good reform strategy would have three principal components: (1) increased direct assignment of usage-insensitive costs to the maximum feasible extent; (2) significantly increased pricing flexibility for local and long-distance carriers to recover costs effectively with minimal distortions of efficiency; and (3) rationalization of the scheme for explicit subsidies to maximize the effective support per subsidy buck.

We have emphasized the importance of regulators' affording carriers substantially greater pricing flexibility to cope with the increasingly severe cost recovery problem that confronts the industry and its customers.<sup>45</sup> It certainly may be possible to economize on costs. Indeed, that was precisely the purpose of the FCC's adopting price-cap regulation — to give carriers strong profit incentives to lower costs and be more creative in how they deliver service. That effort has been a huge success in lowering access costs. But there are ultimately limits on the ability to cut costs consistent with effective performance. There are comparable limits on the ability to reduce profits without adversely affecting incentives and the ability to raise capital. Raising capital is essential to maintain quality of service and to deploy advanced network infrastructure, including that necessary for expanded universal public services.

Regulators can help cope with the cost recovery problem through SLC increases, but regulators appear to be reluctant to grasp the "cost assignment" bull by the horns and to face the (likely overstated) consequences of full direct cost assignment.<sup>46</sup>

Only a limited number of policy levers are at regulators' disposal. One potentially very powerful lever is greater pricing flexibility. It can serve now, as it has in the past in both telecommunications and other industry settings, to cope constructively with a difficult economic problem whose resolution has important ramifications for the maintenance of good quality service.

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<sup>45</sup> Flexibility does (and need) not imply "license." We have suggested elsewhere that the nature and amount of the showing (authentication) carriers be required to marshal to justify their tariffs varies appropriately with the effectiveness of the competition they confront. See Haring & Rohlfs, *op. cit.* At the same time, the availability of unbundled elements at cost provides a powerful regulatory safeguard and warrants substantial relaxation of regulatory controls on retail prices and prices of substitute inputs.

<sup>46</sup> It is significant to note that subscriber penetration did not fall when SLCs were initially implemented; penetration rates, in fact, rose as economic analysis predicted it would.

Particularly to the extent that regulators are reluctant to pull other policy levers, pricing flexibility assumes even greater significance.

# **ATTACHMENT**

**3**

COMPANY: BELLSOUTH TELECOMMUNICATIONS  
STATE : COMPANY

Summary

A/C NO.	ESTIMATED	A C T U A L		RESERVE IMBALANCE CALCULATION		
	INVEST.	RESERVE 1-1-97		THEO.	THEO.	RESERVE
	1-1-97			RES.	RES.	IMBALANCE
	(\$MILLIONS)	(\$MILLIONS)	%	%	\$MILLIONS	(\$MILLIONS)
	A	B	C	I	J = I * A	K = J - B
Alabama	4399.4	2143.0	48.7	54.5	2398.4	255.4
Florida	10646.2	5226.7	49.1	54.1	5760.3	533.6
Georgia	8034.2	3799.1	47.3	51.0	4095.9	296.7
Kentucky	2349.7	1129.8	48.1	55.3	1299.3	169.4
Louisiana	4337.5	2358.6	54.4	60.8	2637.3	278.7
Mississippi	2872.2	1434.1	49.9	55.8	1603.0	163.0
North Carolina	4440.8	2108.4	47.5	53.9	2395.1	283.9
South Carolina	2748.0	1331.2	48.4	56.4	1549.7	212.2
Tennessee	4628.6	2088.7	45.1	54.9	2539.2	450.5
	44456.6	21619.6	48.6	54.6	24278.2	2643.5

Note: Combined BST reserve imbalance of \$2643.5M is \$579.4M separated to an Interstate basis.

24-Jan-97

COMPANY: BELLSOUTH TELECOMMUNICATIONS  
STATE : ALABAMA

A/C NO.	A/C NAME	ESTIMATED	ACTUAL			INPUT VARIABLES					RESERVE IMBALANCE CALCULATION		
		INVEST.	RESERVE 1-1-97			PROP. PLIFE	VG/ELG				THEO.	THEO.	RESERVE
		1-1-97	1-1-97		RES.						RES.	IMBALANCE	
		(\$MILLIONS)	(\$MILLIONS)	%	ARL		ASL	ANS	FNS	%	(\$MILLIONS)	(\$MILLIONS)	
A	B	C	D	E	F	G	H	I	J=I*A	K=J-B			
2112	MOT.VEH'S.	49.3	30.2	61.3	8.0	3.7	8.4	13	12	49.7	24.5	-5.7	
2115	GAR WK EQUIP	0.7	-1.4	-201.0	12.0	5.5	12.6	-29	0	43.7	0.3	1.7	
2116	OTH WK EQUIP	45.9	6.7	14.6	15.0	7.1	9.6	1	0	26.8	12.3	5.6	
2121	BLDG'S.	431.1	83.7	19.4	45.0	29.0	40.0	-5	4	19.9	85.8	2.0	
2122	FURN.	7.4	3.0	40.8	15.0	11.3	16.1	12	9	29.2	2.2	-0.9	
2123.1	OFFICE SUPP EQ	17.0	9.7	56.9	11.5	6.0	10.1	10	10	36.5	6.2	-3.5	
2123.2	COMP COMM E	12.7	1.8	14.0	7.0	4.3	4.8	15	10	13.9	1.8	0.0	
2124	COMPUTERS	516.6	264.2	51.1	4.4	2.2	4.7	5	0	55.5	286.7	22.5	
2211	ESS - ANA	168.9	137.1	81.1	2001.3 *	4.6	11.1	7	0	61.5	103.9	-33.2	
2212	ESS - DIG	628.8	241.0	38.3	10.0	4.8	10.3	2	0	54.3	341.5	100.5	
2220	OPER. SVC'S	10.4	3.9	37.4	10.0	5.6	9.0	1	0	38.4	4.0	0.1	
2231	RADIO	40.9	30.6	74.9	9.0	3.4	11.6	0	0	70.7	28.9	-1.7	
2232.11	CIRCUIT-DDS	11.2	6.9	62.2	8.0	3.5	8.6	5	2	59.3	6.6	-0.3	
2232.12	CIRCUIT-DIGITA	659.0	383.1	58.1	9.3	4.7	9.2	3	0	50.4	332.1	-50.9	
2232.20	CIRCUIT-ANALO	51.5	46.2	89.7	6.9	3.3	11.0	0	-2	72.0	37.1	-9.1	
2311	STA APP	0.2	0.0	8.9	6.0	4.4	5.7	0	0	22.8	0.0	0.0	
2341	LARGE PBX	4.9	4.9	100.4	5.6	1.9	6.9	2	-4	77.0	3.8	-1.2	
2362	OTH.TERM.EQ.	22.0	20.3	92.3	6.0	2.3	7.4	2	-4	73.5	16.2	-4.1	
2411	POLES	118.9	56.5	47.5	34.0	19.3	28.0	-44	-50	50.7	60.3	3.8	
2421.1	AER.CA.MET	449.7	259.0	57.6	14.0	6.3	15.6	-17	-20	72.8	327.4	68.4	
2421.2	AER.CA. FIBER	22.3	5.8	26.1	20.0	12.0	16.1	-20	-20	30.6	6.8	1.0	
2422.1	UG CA.MET.	184.2	118.2	64.2	12.0	4.0	17.7	-20	-22	94.9	174.8	56.6	
2422.2	UG CA. FIBER	44.6	14.2	31.8	20.0	11.6	17.2	-20	-20	39.1	17.4	3.2	
2423.1	BUR.CA.MET.	696.7	354.4	50.9	14.0	6.6	16.0	-10	-10	64.6	450.1	95.7	
2423.2	BUR.CA. FIBER	55.2	17.1	31.0	20.0	12.2	16.1	-10	-10	26.6	14.7	-2.4	
2424	SUB.CA.	1.6	0.9	58.0	14.0	7.1	22.0	-3	-5	71.8	1.1	0.2	
2426	INTRABLDG. CA	11.6	7.8	67.5	20.0	11.4	23.0	-7	-11	58.0	6.7	-1.1	
2441	CONDUIT	136.1	37.2	27.3	55.0	37.0	53.0	-10	-10	33.2	45.2	8.0	
TOTAL		4399.4	2143.0	48.7						54.5	2398.4	255.4	

\* Represents an Average Year of Final Retirement (AYFR)

24-Jan-97

COMPANY: BELLSOUTH TELECOMMUNICATIONS  
STATE : FLORIDA

A/C NO.	A/C NAME	ESTIMATED			INPUT VARIABLES					RESERVE IMBALANCE CALCULATION		
		INVEST.	ACTUAL		PROP. PLIFE	VG/ELG				THEO.	THEO.	RESERVE
		1-1-97	RESERVE	1-1-97		ARL	ASL	ANS	FNS	RES.	RES.	IMBALANCE
		(\$MILLIONS)	\$MILLIONS	%						%	(\$MILLIONS)	(\$MILLIONS)
		A	B	C	D	E	F	G	H	I	J=I*A	K=J-B
2112	MOT. VEH'S.	77.9	24.2	31.1	8.0	4.9	7.6	11	10	32.6	25.4	1.2
2114	SPL PURP VEH	0.0	0.0	49.7	7.0	4.2	6.7	0	0	37.3	0.0	0.0
2115	GAR WK EQUIP	1.8	-1.1	-58.3	12.0	5.1	11.5	-20	0	46.8	0.8	1.9
2116	OTH WK EQUIP	106.7	8.7	8.2	15.0	9.1	13.1	1	1	30.2	32.2	23.5
2121	BLDG'S.	755.2	156.7	20.8	45.0	30.0	41.0	1	4	23.6	178.2	21.5
2122	FURN.	6.2	3.9	63.1	15.0	10.6	15.2	7	14	21.1	1.3	-2.6
2123.1	OFFICE SUPP EQ	9.8	5.6	57.2	11.5	4.8	10.8	5	10	47.8	4.7	-0.9
2123.2	COMP COMM EQ	19.3	6.6	34.3	7.0	3.8	6.6	20	10	43.9	8.5	1.8
2124	COMPUTERS	434.2	238.1	54.8	4.4	2.1	4.7	6	0	58.0	251.8	13.7
2211	ESS - ANA	378.8	291.2	76.9	1999.3 *	2.7	8.4	9	0	70.8	268.2	-23.0
2212	ESS - DIG	1352.3	505.9	37.4	10.0	4.9	10.2	3	0	53.4	722.1	216.2
2220	OPER. SVC'S	42.0	13.6	32.3	10.0	5.2	9.5	5	0	48.0	20.2	6.6
2231	RADIO	1.4	0.9	60.4	9.0	4.8	8.6	-3	-5	47.5	0.7	-0.2
2232.11	CIRCUIT-DDS	15.2	9.5	62.8	8.0	3.9	8.2	5	0	54.8	8.3	-1.2
2232.12	CIRCUIT-DIGITAL	2125.6	1112.3	52.3	9.3	4.5	9.4	4	2	52.0	1105.3	-7.0
2232.20	CIRCUIT-ANALOG	83.3	75.9	91.1	6.9	2.2	10.0	3	-10	88.7	73.8	-2.0
2311	STA APP	0.3	0.2	71.1	6.0	1.9	7.2	0	0	73.6	0.2	0.0
2341	LARGE PBX	9.6	6.3	65.7	5.6	3.1	6.4	10	0	56.4	5.4	-0.9
2362	OTH. TERM. EQ.	105.2	95.0	90.4	6.0	2.2	8.0	4	-4	77.6	81.6	-13.4
2411	POLES	142.5	76.9	54.0	34.0	18.9	26.0	-69	-75	52.2	74.4	-2.6
2421.1	AER. CA. MET	717.1	412.8	57.6	14.0	7.3	14.8	-11	-11	56.3	403.7	-9.0
2421.2	AER. CA. FIBER	35.4	7.9	22.2	20.0	12.2	15.8	-11	-12	26.3	9.3	1.5
2422.1	UG CA. MET.	714.1	387.6	54.3	12.0	4.3	17.3	-7	-7	80.4	574.2	186.6
2422.2	UG CA. FIBER	242.9	76.0	31.3	20.0	10.9	16.1	-6	-6	34.2	83.1	7.0
2423.1	BUR. CA. MET.	2362.0	1428.5	60.5	14.0	6.0	15.2	-8	-8	65.4	1544.8	116.3
2423.2	BUR. CA. FIBER	138.3	41.3	29.9	20.0	11.9	16.9	0	0	29.6	40.9	-0.4
2424	SUB. CA.	9.1	5.3	57.7	14.0	8.1	19.8	-3	-5	62.9	5.7	0.5
2426	INTRABLDG. CA.	43.6	29.0	66.7	20.0	11.6	21.0	-6	-12	53.4	23.3	-5.8
2441	CONDUIT	716.5	207.8	29.0	55.0	38.0	53.0	-8	-7	29.6	212.1	4.3
TOTAL		10646.2	5226.7	49.1						54.1	5760.3	533.6

\* Represents an Average Year of Final Retirement (AYFR)

24-Jan-97

COMPANY: BELLSOUTH TELECOMMUNICATIONS  
STATE : GEORGIA

A/C NO.	A/C NAME	ESTIMATED			INPUT VARIABLES						RESERVE IMBALANCE CALCULATION		
		INVEST.	ACTUAL		PROP.	VG/ELG					THEO.	THEO.	RESERVE
		1-1-97	RESERVE	1-1-97		PLIFE	ARL	ASL	ANS	FNS	RES.	RES.	IMBALANCE
		\$MILLIONS	\$MILLIONS	%							%	(\$MILLIONS)	(\$MILLIONS)
		A	B	C	D	E	F	G	H		I	J=I*A	K=J-B
2112	MOT.VEH'S.	59.0	18.3	30.9	8.0	4.8	7.7	15	13		34.0	20.1	1.8
2115	GAR WK EQUIP	1.0	-1.3	-123.8	12.0	6.1	11.2	-35	0		26.5	0.3	1.6
2116	OTH WK EQUIP	91.7	25.9	28.3	15.0	8.7	12.7	1	1		31.2	28.6	2.7
2121	BLDG'S.	536.0	166.2	31.0	45.0	29.0	39.0	-1	4		20.9	112.0	-54.1
2122	FURN.	16.1	8.3	51.7	15.0	9.9	16.6	13	14		34.1	5.5	-2.8
2123.1	OFFICE SUPP EQ	17.7	7.6	43.3	11.5	6.1	10.0	7	10		33.3	5.9	-1.8
2123.2	COMP COMM EQ	16.0	3.8	24.1	7.0	4.4	6.3	28	10		39.7	6.3	2.5
2124	COMPUTERS	501.9	280.6	55.9	4.4	2.2	4.8	6	0		56.9	285.6	5.0
2211	ESS - ANA	381.5	294.1	77.1	1999.4 *	2.8	9.3	8	0		72.3	275.8	-18.3
2212	ESS - DIG	1014.0	365.1	36.0	10.0	5.0	10.0	2	0		51.0	517.1	152.0
2220	OPER. SVC'S	28.0	12.5	44.5	10.0	4.8	10.1	2	0		53.4	15.0	2.5
2231	RADIO	4.9	2.7	56.4	9.0	4.6	8.3	0	-5		49.6	2.4	-0.3
2232.11	CIRCUIT-DDS	12.8	8.4	65.8	8.0	3.8	8.2	5	0		56.0	7.2	-1.3
2232.12	CIRCUIT_DIGITAL	1640.1	814.1	49.6	9.3	4.8	9.0	4	2		46.8	767.5	-46.5
2232.20	CIRCUIT-ANALOG	69.9	54.8	78.4	6.9	2.4	9.5	-2	-2		76.2	53.2	-1.5
2311	STA APP	0.3	0.1	42.4	6.0	3.1	6.8	0	0		54.4	0.2	0.0
2341	LARGE PBX	9.6	4.8	50.7	5.6	4.2	6.6	9	0		42.1	4.0	-0.8
2362	OTH.TERM.EQ.	70.7	48.0	67.8	6.0	4.3	8.3	5	-4		54.8	38.8	-9.2
2411	POLES	121.5	53.5	44.0	34.0	18.7	25.0	-49	-56		44.5	54.1	0.6
2421.1	AER.CA.MET	867.3	483.0	55.7	14.0	6.9	14.4	-12	-13		59.3	514.3	31.3
2421.2	AER.CA. FIBER	62.3	16.8	27.0	20.0	11.3	15.4	-14	-14		30.4	18.9	2.1
2422.1	UG CA.MET.	389.8	223.3	57.3	12.0	4.4	17.1	-8	-10		82.2	320.4	97.1
2422.2	UG CA. FIBER	144.0	46.6	32.4	20.0	11.4	17.1	-8	-8		36.0	51.8	5.2
2423.1	BUR.CA.MET.	1397.1	702.9	50.3	14.0	6.5	14.6	-6	-6		58.8	821.5	118.6
2423.2	BUR.CA. FIBER	139.0	45.0	32.4	20.0	11.6	17.3	-2	-2		33.6	46.7	1.7
2424	SUB.CA.	0.4	0.3	64.6	14.0	8.0	18.8	-11	-9		61.8	0.3	0.0
2426	INTRABLDG. CA.	36.9	23.7	64.3	20.0	10.4	20.0	-15	-16		56.2	20.7	-3.0
2441	CONDUIT	404.8	89.8	22.2	55.0	39.0	51.0	-11	-10		25.1	101.6	11.8
TOTAL		8034.2	3799.1	47.3							51.0	4095.9	296.7

\* Represents an Average Year of Final Retirement (AYFR)



24-Jan-97

COMPANY: BELLSOUTH TELECOMMUNICATIONS  
STATE : KENTUCKY

A/C NO.	A/C NAME	ESTIMATED	ACTUAL			INPUT VARIABLES					RESERVE IMBALANCE CALCULATION		
		INVEST.	RESERVE		PROP.	VG/ELG				THEO.	THEO.	RESERVE	
		1-1-97	1-1-97	PLIFE		ARL	ASL	ANS	FNS	RES.	RES.	IMBALANCE	
		(\$MILLIONS)	MILLION	%						%	(\$MILLIONS)	(\$MILLIONS)	
		A	B	C	D	E	F	G	H	I	J=I*A	K=J-B	
2112	MOT.VEH'S.	32.8	20.9	63.6	8.0	3.4	8.5	14	14	51.6	16.9	-3.9	
2115	GAR WK EQUIP	0.9	-1.5	-160.8	12.0	5.8	11.3	-34	0	31.2	0.3	1.8	
2116	OTH WK EQUIP	20.8	3.6	17.5	15.0	7.7	11.2	0	0	31.3	6.5	2.9	
2121	BLDG'S.	168.9	44.5	26.4	45.0	29.0	38.0	-4	3	17.6	29.7	-14.8	
2122	FURN.	1.3	0.7	59.6	15.0	11.7	16.6	6	5	28.7	0.4	-0.4	
2123.1	OFFICE SUPP EQ	1.7	1.2	70.3	11.5	6.2	11.1	15	10	42.5	0.7	-0.5	
2123.2	COMP COMM EQ	4.0	0.7	17.3	7.0	4.6	6.2	21	10	31.4	1.3	0.6	
2124	COMPUTERS	50.7	25.8	50.8	4.4	2.3	4.3	10	0	51.9	26.3	0.6	
2211	ESS - ANA	68.8	44.7	65.0	1999.4 *	2.8	8.9	9	0	71.4	49.1	4.4	
2212	ESS - DIG	353.8	118.2	33.4	10.0	4.9	10.1	1	0	52.0	184.0	65.8	
2220	OPER. SVC'S	3.4	-0.1	-2.2	10.0	5.6	8.9	-3	0	35.2	1.2	1.3	
2231	RADIO	26.5	20.2	76.1	9.0	3.3	11.9	-3	-5	76.4	20.3	0.1	
2232.11	CIRCUIT-DDS	5.6	3.3	59.5	8.0	4.0	8.1	8	2	52.6	2.9	-0.4	
2232.12	CIRCUIT-DIGITAL	381.2	198.7	52.1	9.3	4.7	9.1	2	0	49.4	188.3	-10.4	
2232.20	CIRCUIT-ANALOG	43.4	27.4	63.1	6.9	2.4	10.4	-2	-2	78.5	34.1	6.7	
2311	STA APP	0.1	0.0	-27.4	6.0	4.6	4.8	3	0	7.0	0.0	0.0	
2341	LARGE PBX	3.9	2.8	72.5	5.6	2.5	6.1	-4	-4	61.4	2.4	-0.4	
2362	OTH.TERM.EQ.	14.0	11.4	81.0	6.0	2.7	7.3	4	-4	68.5	9.6	-1.8	
2411	POLES	108.4	56.1	51.8	34.0	19.4	27.0	-45	-50	45.8	49.6	-6.5	
2421.1	AER.CA.MET	370.5	219.9	59.4	14.0	7.1	16.4	-13	-15	66.1	244.9	25.0	
2421.2	AER.CA. FIBER	42.5	11.7	27.5	20.0	11.6	16.9	-12	-13	36.1	15.3	3.6	
2422.1	UG CA.MET.	122.6	79.3	64.7	12.0	4.5	17.4	-29	-30	96.6	118.4	39.1	
2422.2	UG CA. FIBER	24.9	6.5	26.1	20.0	11.6	17.0	-19	-20	38.8	9.7	3.2	
2423.1	BUR.CA.MET.	364.0	196.0	53.8	14.0	6.1	15.6	-10	-10	67.0	243.9	47.9	
2423.2	BUR.CA. FIBER	18.3	5.4	29.3	20.0	12.1	16.8	-9	-10	31.5	5.8	0.4	
2424	SUB.CA.	0.2	0.1	31.9	14.0	7.9	16.0	-17	-5	47.2	0.1	0.0	
2426	INTRABLDG. CA.	6.6	4.0	59.9	20.0	11.5	22.0	-3	-6	52.2	3.5	-0.5	
2441	CONDUIT	110.1	28.6	26.0	55.0	38.0	53.0	-10	-10	31.1	34.2	5.7	
TOTAL		2349.7	1129.8	48.1						55.3	1299.3	169.4	

24-Jan-97

COMPANY: BELLSOUTH TELECOMMUNICATIONS  
STATE : LOUISIANA

A/C NO.	A/C NAME	ESTIMATED	ACTUAL		INPUT VARIABLES					RESERVE IMBALANCE CALCULATION		
		INVEST.	RESERVE	1-1-97	PROP.	VG/ELG				THEO.	THEO.	RESERVE
		1-1-97	1-1-97	1-1-97		PLIFE	ARL	ASL	ANS	FNS	RES.	RES.
		(\$MILLIONS)	MILLION	%	D	E	F	G	H	I	J=I*A	K=J-B
		A	B	C								
2112	MOT.VEH'S.	55.5	37.2	67.1	8.0	3.3	8.7	10	10	55.9	31.0	-6.2
2115	GAR WK EQUIP	1.5	-1.7	-117.4	12.0	6.5	11.5	-35	0	23.7	0.3	2.0
2116	OTH WK EQUIP	44.4	-0.8	-1.7	15.0	7.9	11.1	1	0	29.5	13.1	13.9
2121	BLDG'S.	240.4	78.9	32.8	45.0	28.0	40.0	1	5	25.7	61.8	-17.1
2122	FURN.	1.7	1.2	67.7	15.0	8.3	14.3	3	2	41.7	0.7	-0.4
2123.1	OFFICE SUPP EQ	4.1	3.4	83.5	11.5	5.7	11.3	9	10	44.1	1.8	-1.6
2123.2	COMP COMM EQ	4.7	-0.1	-3.1	7.0	4.8	5.8	25	10	27.9	1.3	1.5
2124	COMPUTERS	88.1	47.6	54.0	4.4	2.3	4.3	11	0	52.4	46.2	-1.4
2211	ESS - ANA	228.3	159.3	69.8	2001.9 *	5.2	11.1	6	0	56.0	127.9	-31.5
2212	ESS - DIG	577.5	210.0	36.4	10.0	4.9	10.3	1	0	52.9	305.5	95.5
2220	OPER. SVC'S	11.3	1.4	12.2	10.0	5.6	9.0	-1	0	37.2	4.2	2.8
2231	RADIO	16.3	11.7	71.9	9.0	2.6	12.3	-2	-5	83.4	13.6	1.9
2232.11	CIRCUIT-DDS	8.8	5.3	60.6	8.0	4.0	7.7	8	2	50.2	4.4	-0.9
2232.12	CIRCUIT-DIGITAL	733.6	419.7	57.2	9.3	4.5	9.7	2	0	54.5	399.8	-19.9
2232.20	CIRCUIT-ANALOG	64.1	35.6	55.6	6.9	2.1	10.4	-2	-2	81.4	52.2	16.5
2311	STA APP	0.0	-0.1	-247.1	6.0	4.0	3.7	0	0	-8.1	0.0	0.1
2341	LARGE PBX	5.9	4.9	83.2	5.6	2.5	6.0	1	-4	62.8	3.7	-1.2
2362	OTH.TERM.EQ.	25.8	23.0	88.9	6.0	2.6	7.1	2	-4	68.1	17.6	-5.4
2411	POLES	92.2	49.0	53.1	34.0	18.6	26.0	-60	-69	54.5	50.3	1.3
2421.1	AER.CA.MET	436.9	298.9	68.4	14.0	6.1	15.5	-17	-20	74.0	323.3	24.4
2421.2	AER.CA. FIBER	47.1	16.0	34.0	20.0	11.5	16.7	-20	-20	37.4	17.6	1.6
2422.1	UG CA.MET.	295.7	169.5	57.3	12.0	4.0	17.6	-23	-25	97.0	286.8	117.3
2422.2	UG CA. FIBER	44.0	14.7	33.3	20.0	11.4	17.3	-19	-20	41.6	18.3	3.6
2423.1	BUR.CA.MET.	981.2	673.3	68.6	14.0	5.2	16.5	-10	-10	75.3	738.8	65.5
2423.2	BUR.CA. FIBER	30.2	11.6	38.4	20.0	12.1	17.2	-10	-10	32.6	9.9	-1.7
2424	SUB.CA.	7.6	4.3	56.0	14.0	7.1	21.0	-8	-5	68.5	5.2	1.0
2426	INTRABLDG. CA.	25.9	17.2	66.3	20.0	11.3	22.0	-33	-30	61.7	16.0	-1.2
2441	CONDUIT	264.4	67.4	25.5	55.0	37.0	53.0	-11	-10	32.5	85.9	18.5
TOTAL		4337.5	2358.6	54.4						60.8	2637.3	278.7

\* Represents an Average Year of Final Retirement (AYFR)

24-Jan-97

COMPANY: BELLSOUTH TELECOMMUNICATIONS  
STATE : MISSISSIPPI

A/C NO.	A/C NAME	ESTIMATED	ACTUAL		INPUT VARIABLES					RESERVE IMBALANCE CALCULATION		
		INVEST.	RESERVE	1-1-97	PROP.	VG/ELG				THEO.	THEO.	RESERVE
		1-1-97	1-1-97	%		ARL	ASL	ANS	FNS	RES.	RES.	IMBALANCE
		(\$MILLIONS)	MILLION		PLIFE					%	(\$MILLIONS)	(\$MILLIONS)
		A	B	C	D	E	F	G	H	I	J=I*A	K=J-B
2112	MOT.VEH'S.	34.1	22.8	66.8	8.0	3.4	8.6	11	11	53.8	18.3	-4.4
2115	GAR WK EQUIP	0.6	-1.2	-203.3	12.0	6.5	10.9	-43	0	14.7	0.1	1.2
2116	OTH WK EQUIP	23.0	-1.0	-4.4	15.0	5.8	7.2	1	0	20.3	4.7	5.7
2121	BLDG'S.	160.5	38.1	23.7	45.0	28.0	38.0	-1	2	23.6	37.9	-0.2
2122	FURN.	0.9	0.5	63.9	15.0	10.2	15.2	3	3	31.9	0.3	-0.3
2123.1	OFFICE SUPP EQ	6.0	3.3	54.4	11.5	6.2	10.1	9	10	34.1	2.0	-1.2
2123.2	COMP COMM EQ	4.1	0.9	20.6	7.0	4.3	5.9	23	10	33.9	1.4	0.6
2124	COMPUTERS	171.9	91.7	53.4	4.4	2.3	4.4	5	0	50.3	86.4	-5.3
2211	ESS - ANA	37.9	26.9	71.2	1997.3 *	0.8	5.5	7	0	86.5	32.7	5.8
2212	ESS - DIG	451.8	158.2	35.0	10.0	4.8	10.3	1	0	53.9	243.5	85.3
2220	OPER. SVC'S	9.2	1.4	15.5	10.0	5.8	8.7	-1	0	32.7	3.0	1.6
2231	RADIO	0.0	-5.9	#DIV/0!	0.0	0.0	13.2	-1	-5	105.0	0.0	0.0
2232.11	CIRCUIT-DDS	5.7	3.0	53.3	8.0	4.3	8.0	6	2	47.5	2.7	-0.3
2232.12	CIRCUIT-DIGITAL	511.9	291.1	56.9	9.3	4.6	9.3	2	0	51.5	263.7	-27.5
2232.20	CIRCUIT-ANALOG	43.1	23.0	53.3	6.9	2.3	10.0	1	-2	79.2	34.2	11.2
2311	STA APP	0.0	0.0	0.0	6.0	4.0	3.4	0	0	-17.6	0.0	0.0
2341	LARGE PBX	7.4	4.4	59.9	5.6	2.9	5.4	19	-4	60.5	4.5	0.0
2362	OTH.TERM.EQ.	11.6	9.2	79.2	6.0	2.9	6.5	4	-4	61.2	7.1	-2.1
2411	POLES	89.2	43.4	48.7	34.0	19.3	26.0	-47	-53	43.9	39.2	-4.3
2421.1	AER.CA.MET	413.8	253.5	61.2	14.0	6.4	15.5	-9	-10	65.0	269.0	15.5
2421.2	AER.CA. FIBER	29.9	9.0	30.2	20.0	11.2	16.2	-9	-10	34.6	10.4	1.3
2422.1	UG CA.MET.	80.2	53.3	66.5	12.0	3.1	17.1	-22	-23	100.9	80.9	27.5
2422.2	UG CA. FIBER	16.5	7.0	42.5	20.0	11.4	17.5	-20	-20	41.8	6.9	-0.1
2423.1	BUR.CA.MET.	631.9	355.2	56.2	14.0	6.2	15.1	-10	-10	64.8	409.5	54.3
2423.2	BUR.CA. FIBER	57.9	22.7	39.2	20.0	12.0	17.4	-10	-10	34.1	19.7	-3.0
2424	SUB.CA.	1.5	0.7	49.6	14.0	6.8	16.7	-3	-5	63.1	0.9	0.2
2426	INTRABLDG. CA.	7.9	5.5	68.9	20.0	11.4	23.0	-3	-12	60.9	4.8	-0.6
2441	CONDUIT	63.8	17.2	27.0	55.0	36.0	52.0	-8	-5	30.2	19.3	2.0
TOTAL		2872.2	1434.1	49.9						55.8	1603.0	163.0

24-Jan-97

COMPANY: BELL SOUTH TELECOMMUNICATIONS  
STATE : NORTH CAROLINA

A/C NO.	A/C NAME	ESTIMATED INVEST. 1-1-97 (\$MILLIONS)	ACTUAL RESERVE 1-1-97 \$MILLION %		INPUT VARIABLES					RESERVE IMBALANCE CALCULATION		
		A	B	C	PROP. PLIFE D	VG/ELG ARL E	ASL F	ANS G	FNS H	THEO. RES. % I	THEO. RES. (\$MILLIONS) J=I*A	RESERVE IMBALANCE (\$MILLIONS) K=J-B
2112	MOT.VEH'S.	23.9	9.2	38.5	8.0	4.8	7.8	12	10	35.8	8.6	-0.6
2115	GAR WK EQUIP	1.0	-0.5	-52.3	12.0	5.1	11.7	-29	0	43.8	0.5	1.0
2116	OTH WK EQUIP	50.6	8.8	17.4	15.0	9.3	12.6	1	1	25.9	13.1	4.3
2121	BLDG'S.	214.1	55.2	25.8	45.0	29.0	39.0	1	3	23.4	50.1	-5.1
2122	FURN.	3.3	2.0	60.0	15.0	9.2	14.9	11	14	31.0	1.0	-1.0
2123.1	OFFICE SUPP EQ	7.0	2.6	37.8	11.5	5.5	10.9	11	10	45.1	3.2	0.5
2123.2	COMP COMM EQ	6.6	2.2	33.2	7.0	4.8	6.5	23	10	33.1	2.2	0.0
2124	COMPUTERS	311.3	194.0	62.3	4.4	2.0	5.2	6	0	63.8	198.6	4.6
2211	ESS - ANA	5.4	1.0	17.6	1998.0 *	1.5	4.6	8	0	70.0	3.8	0.0
2212	ESS - DIG	783.7	292.9	37.4	10.0	4.9	10.3	3	0	53.9	422.4	129.6
2220	OPER. SVC'S	18.7	6.5	34.9	10.0	5.5	9.0	1	0	39.5	7.4	0.9
2231	RADIO	2.4	0.8	31.6	9.0	5.0	8.3	-3	-1	39.0	0.9	0.2
2232.11	CIRCUIT-DDS	8.2	5.8	71.1	8.0	3.7	8.2	0	-7	61.9	5.1	-0.8
2232.12	CIRCUIT-DIGITAL	832.0	432.3	52.0	9.3	4.7	9.1	-1	-3	50.8	422.7	-9.6
2232.20	CIRCUIT-ANALOG	42.8	46.0	107.3	6.9	1.2	10.1	-8	-10	97.2	41.6	-4.3
2311	STA APP	0.5	0.1	31.0	6.0	5.1	6.8	0	0	25.0	0.1	0.0
2341	LARGE PBX	5.5	3.5	64.3	5.6	4.0	6.9	5	0	44.9	2.5	-1.1
2362	OTH.TERM.EQ.	21.8	15.4	70.5	6.0	3.9	7.3	3	-4	52.2	11.4	-4.0
2411	POLES	68.0	35.0	51.5	34.0	19.2	27.0	-47	-54	49.5	33.7	-1.3
2421.1	AER.CA.MET	425.2	261.8	61.6	14.0	6.4	15.7	-11	-13	67.8	288.3	26.5
2421.2	AER.CA. FIBER	30.5	9.5	31.1	20.0	11.5	16.4	-13	-14	34.8	10.6	1.1
2422.1	UG CA.MET.	197.5	109.3	55.3	12.0	4.5	16.9	-12	-12	82.2	162.3	53.0
2422.2	UG CA. FIBER	73.1	22.6	30.8	20.0	11.0	16.9	-9	-9	38.1	27.9	5.3
2423.1	BUR.CA.MET.	1006.6	516.2	51.3	14.0	6.6	14.6	-7	-7	58.6	589.8	73.7
2423.2	BUR.CA. FIBER	104.6	24.0	22.9	20.0	12.3	16.6	0	0	25.9	27.1	3.1
2424	SUB.CA.	0.6	0.4	64.8	14.0	7.6	20.0	-3	-3	63.9	0.4	0.0
2426	INTRABLDG. CA.	16.2	9.9	61.6	20.0	9.8	21.0	-3	-7	58.9	9.5	-0.4
2441	CONDUIT	179.7	42.1	23.4	55.0	39.0	53.0	-10	-9	28.1	50.5	8.4
TOTAL		4440.8	2108.4	47.5						53.9	2395.1	283.9

\* Represents an Average Year of Final Retirement (AYFR)

24-Jan-97

COMPANY: BELLSOUTH TELECOMMUNICATIONS  
STATE : SOUTH CAROLINA

		ESTIMATED	ACTUAL		INPUT VARIABLES					RESERVE IMBALANCE CALCULATION		
A/C	A/C	INVEST.	RESERVE	1-1-97	PROP.	VG/ELG				THEO.	THEO.	RESERVE
NO.	NAME	1-1-97	1-1-97		PLIFE	ARL	ASL	ANS	FNS	RES.	RES.	IMBALANCE
		(\$MILLIONS)	MILLION	%						%	(\$MILLIONS)	(\$MILLIONS)
		A	B	C	D	E	F	G	H	I	J=I*A	K=J-B
2112	MOT.VEH'S.	16.4	5.9	36.2	8.0	4.5	7.4	14	13	34.7	5.7	-0.3
2115	GAR WK EQUIP	0.2	0.0	14.2	12.0	7.3	11.8	-44	0	10.9	0.0	0.0
2116	OTH WK EQUIP	27.9	5.9	21.1	15.0	8.3	12.3	1	1	32.2	9.0	3.1
2121	BLDG'S.	117.3	34.9	29.7	45.0	28.0	39.0	1	4	24.9	29.2	-5.6
2122	FURN.	1.5	0.9	56.0	15.0	8.2	14.5	9	14	34.5	0.5	-0.3
2123.1	OFFICE SUPP EQ	2.6	1.6	60.9	11.5	5.9	10.7	9	10	39.8	1.0	-0.5
2123.2	COMP COMM EQ	3.4	0.9	26.9	7.0	3.9	6.4	22	10	42.5	1.5	0.5
2124	COMPUTERS	61.6	33.1	53.6	4.4	2.2	4.7	8	0	56.9	35.1	2.0
2211	ESS - ANA	11.0	1.1	10.3	1998.5 *	2.0	6.0	3	0	67.7	7.4	0.0
2212	ESS - DIG	492.4	189.2	38.4	10.0	4.7	10.6	3	0	57.0	280.7	91.5
2220	OPER. SVC'S	6.6	2.8	42.3	10.0	5.0	9.8	0	0	49.0	3.2	0.4
2231	RADIO	0.3	0.0	8.1	9.0	4.8	9.0	-2	-7	52.6	0.2	0.1
2232.11	CIRCUIT-DDS	4.2	2.4	57.6	8.0	4.2	8.0	5	0	50.1	2.1	-0.3
2232.12	CIRCUIT-DIGITAL	516.4	283.4	54.9	9.3	4.6	9.4	5	2	51.5	266.0	-17.5
2232.20	CIRCUIT-ANALOG	28.3	29.0	102.2	6.9	1.7	9.7	2	-5	87.8	24.9	-4.1
2311	STA APP	0.1	0.0	39.0	6.0	3.4	6.7	0	0	49.3	0.1	0.0
2341	LARGE PBX	4.3	2.6	59.6	5.6	3.6	6.6	22	0	57.5	2.5	-0.1
2362	OTH.TERM.EQ.	22.0	16.2	73.5	6.0	3.5	7.9	3	-4	61.0	13.4	-2.8
2411	POLES	28.6	13.0	45.6	34.0	19.2	27.0	-56	-73	62.1	17.7	4.7
2421.1	AER.CA.MET	158.8	101.3	63.8	14.0	6.4	16.1	-9	-11	67.7	107.5	6.2
2421.2	AER.CA. FIBER	2.5	0.6	23.3	20.0	11.3	14.9	-14	-14	27.5	0.7	0.1
2422.1	UG CA.MET.	130.7	78.0	59.7	12.0	4.3	17.5	-12	-13	85.5	111.8	33.7
2422.2	UG CA. FIBER	43.5	14.0	32.2	20.0	11.2	18.1	-8	-8	41.2	17.9	3.9
2423.1	BUR.CA.MET.	848.2	453.2	53.4	14.0	6.1	14.9	-8	-8	63.8	541.1	88.0
2423.2	BUR.CA. FIBER	83.1	20.8	25.0	20.0	12.3	17.5	0	0	29.7	24.7	3.9
2424	SUB.CA.	0.7	0.3	41.5	14.0	7.2	13.9	-1	-1	48.7	0.3	0.0
2426	INTRABLDG. CA.	13.9	8.0	57.4	20.0	9.4	21.0	-5	-13	66.0	9.2	1.2
2441	CONDUIT	121.5	32.1	26.5	55.0	39.0	54.0	-8	-8	30.0	36.4	4.3
TOTAL		2748.0	1331.2	48.4						56.4	1549.7	212.2

\* Represents an Average Year of Final Retirement (AYFR)

24-Jan-97

COMPANY: BELLSOUTH TELECOMMUNICATIONS  
STATE : TENNESSEE

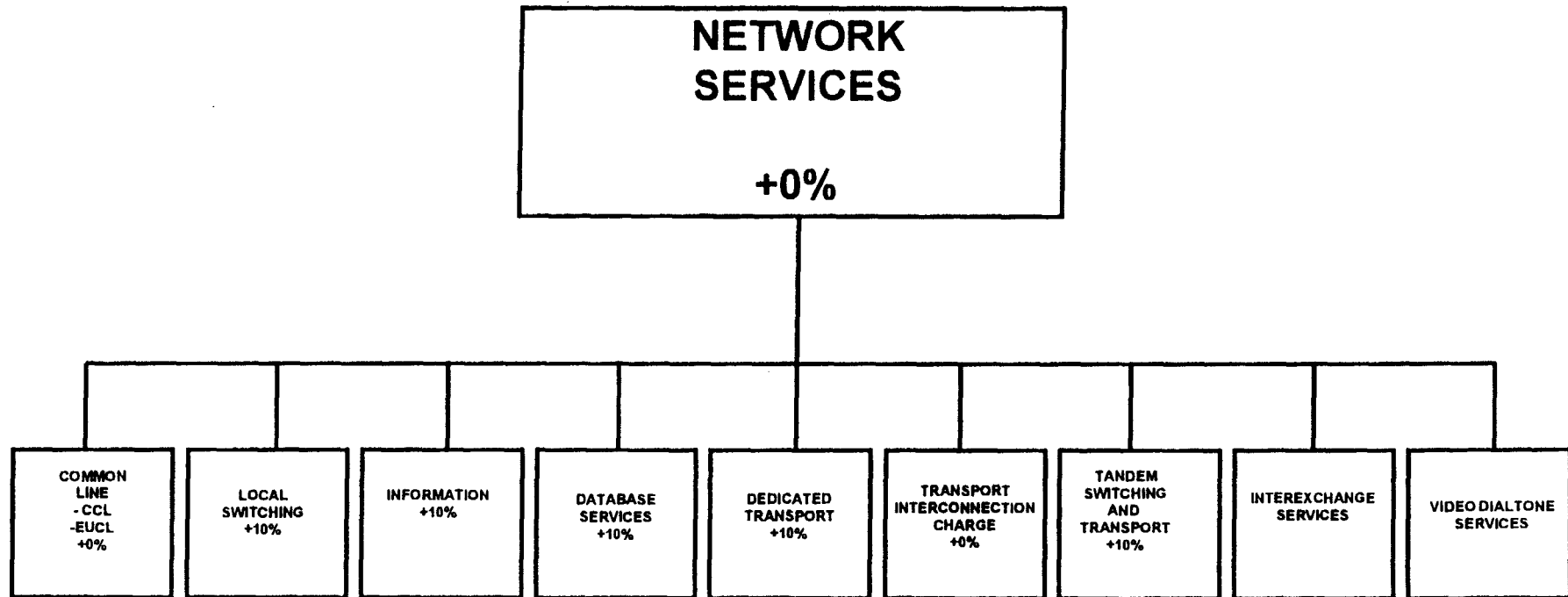
A/C NO.	A/C NAME	ESTIMATED	ACTUAL		INPUT VARIABLES					RESERVE IMBALANCE CALCULATION		
		INVEST.	RESERVE	1-1-97	PROP.	VG/ELG				THEO.	THEO.	RESERVE
		1-1-97	1-1-97			ARL	ASL	ANS	FNS	RES.	RES.	IMBALANCE
		(\$MILLIONS)	MILLION	%	PLIFE					%	(\$MILLIONS)	(\$MILLIONS)
		A	B	C	D	E	F	G	H	I	J=I*A	K=J-B
2112	MOT.VEH'S.	64.7	35.7	55.2	8.0	3.5	8.5	13	12	52.2	33.8	-2.0
2115	GAR WK EQUIP	1.2	-1.1	-91.5	12.0	6.4	10.2	-34	0	15.9	0.2	1.2
2116	OTH WK EQUIP	38.4	6.1	15.8	15.0	7.4	10.8	0	0	31.5	12.1	6.0
2121	BLDG'S.	249.5	70.5	28.2	45.0	28.0	39.0	-1	1	26.5	66.1	-4.4
2122	FURN.	3.3	1.3	40.7	15.0	9.7	14.9	11	9	33.1	1.1	-0.3
2123.1	OFFICE SUPP EQ	7.8	6.4	81.5	11.5	6.0	11.9	11	10	45.1	3.5	-2.8
2123.2	COMP COMM EQ	5.9	0.4	7.2	7.0	4.6	6.2	35	10	41.8	2.5	2.0
2124	COMPUTERS	273.9	147.4	53.8	4.4	2.2	4.7	6	0	56.0	153.4	6.0
2211	ESS - ANA	65.2	56.9	87.2	2000.0 *	3.4	8.2	4	0	60.2	39.2	-17.6
2212	ESS - DIG	771.6	231.7	30.0	10.0	5.1	9.9	1	0	49.0	378.1	146.4
2220	OPER. SVC'S	19.3	0.8	3.9	10.0	5.9	8.5	0	0	30.6	5.9	5.1
2231	RADIO	3.4	-7.0	-206.0	9.0	5.0	13.9	3	0	65.1	2.2	9.2
2232.11	CIRCUIT-DDS	13.8	9.4	68.4	8.0	4.2	8.8	8	2	54.1	7.5	-2.0
2232.12	CIRCUIT-DIGITAL	983.1	491.9	50.0	9.3	4.7	9.2	2	0	49.9	490.6	-1.3
2232.20	CIRCUIT-ANALOG	61.4	39.1	63.6	6.9	2.1	9.6	1	-2	80.3	49.3	10.2
2311	STA APP	0.0	0.0	-68.4	6.0	3.0	5.2	0	0	42.3	0.0	0.0
2341	LARGE PBX	7.4	6.5	87.7	5.6	2.2	7.4	-2	-4	73.7	5.4	-1.0
2362	OTH.TERM.EQ.	24.9	18.7	75.2	6.0	2.7	6.6	6	3	58.5	14.6	-4.2
2411	POLES	127.9	46.0	36.0	34.0	18.9	26.0	-55	-65	52.3	66.9	20.9
2421.1	AER.CA.MET	567.6	321.4	56.6	14.0	6.4	15.1	-12	-15	67.5	383.1	61.7
2421.2	AER.CA. FIBER	62.3	11.8	18.9	20.0	12.0	15.4	-20	-20	26.5	16.5	4.8
2422.1	UG CA.MET.	222.2	120.0	54.0	12.0	4.4	17.5	-14	-15	86.3	191.8	71.8
2422.2	UG CA. FIBER	56.3	14.4	25.6	20.0	11.9	16.6	-19	-20	34.7	19.5	5.1
2423.1	BUR.CA.MET.	750.8	397.2	52.9	14.0	5.9	15.7	-9	-10	69.0	518.1	120.8
2423.2	BUR.CA. FIBER	37.6	9.5	25.3	20.0	12.0	16.2	-9	-10	29.3	11.0	1.5
2424	SUB.CA.	1.2	0.6	52.9	14.0	6.7	18.5	-10	-5	65.2	0.8	0.2
2426	INTRABLDG. CA.	20.2	10.5	52.0	20.0	11.1	21.0	-12	-10	50.8	10.3	-0.2
2441	CONDUIT	187.4	42.5	22.7	55.0	38.0	53.0	-5	-5	29.7	55.7	13.1
TOTAL		4628.6	2088.7	45.1						54.9	2539.2	450.5

\* Represents an Average Year of Final Retirement (AYFR)

# **ATTACHMENT**

**4**

# BELLSOUTH PRICE CAP BASKET STRUCTURE PROPOSAL



**NOTE:** Zone Pricing (Zones 1 to n, where n would be determined) would be allowed for CCL and for the Local Switching, Information, Database Services, Dedicated Transport and the Tandem Switching and Transport service categories.



# **ATTACHMENT**

**5**

# **BELLSOUTH INTERSTATE TRANSPORT INTERCONNECTION CHARGE ANALYSIS**

## **GENERAL**

The Transport Interconnection Charge (TIC) was developed at the expiration of the "equal charge per unit of traffic received and delivered" rule of the MFJ as a result of the interim transport rate structure ordered in CC Docket No. 91-213. CC Docket No. 91-213 rules set switched transport rates (direct or tandem) based on special access rates or the equivalent. Tandem switching rates were set at 20% of the tandem revenue requirement. The TIC permitted the price cap companies to initially recover the same level of total transport revenues under the new structure as they received under the prior rules (equal-charge, per-minute-of-use basis).

To a large extent, the TIC reflects costs which the FCC Part 36 jurisdictional separations rules and Part 69 access charge rules assign to the interstate local transport rate element. Therefore, the TIC represents legitimate, actual costs which have been assigned to the Interstate jurisdiction and to the transport category through the correct application of FCC rules and regulations.

BellSouth has identified the following TIC components:

- ▲ 80% of Tandem Revenue Requirement
- ▲ CCS/STP Costs Allocated to Tandem Switching
- ▲ Host/Remote Configurations
- ▲ Redefined Tandem Switched Transport
- ▲ Analog End Office Trunk Switch Ports
- ▲ COE Maintenance Misallocations
- ▲ Central Office Termination Counts
- ▲ Transport Averaging, Cost Allocations and Cost Recovery

The chart on the following page displays the BellSouth TIC components and the amounts associated with each component. The Total TIC revenue matches that filed in BellSouth's 1996 Annual Interstate Access Tariff Filing (Transmittal No. 356, filed June 27, 1996).

# BELLSOUTH TRANSPORT INTERCONNECTION CHARGE (TIC)

COMPONENT	AMOUNT	% OF TOTAL
TOTAL TIC REVENUE	\$272,434,772	100.0%
80% OF TANDEM REVENUE REQUIREMENT	55,710,080	20.5%
CCS/STP COSTS ALLOCATED TO TANDEM SWITCHING	1,369,920	.5%
HOST/REMOTE CONFIGURATIONS	4,752,709	1.7%
REDEFINED TANDEM SWITCHED TRANSPORT	49,162,168	18.1%
ANALOG END OFFICE TRUNK SWITCH PORTS	6,334,008	2.3%
COE MAINTENANCE MISALLOCATIONS	15,052,000	5.5%
CENTRAL OFFICE TERMINATION COUNTS	84,678,084	31.1%
TRANSPORT AVERAGING, COST ALLOCATIONS AND COST RECOVERY	55,375,803	20.3%

## **TIC COMPONENT DESCRIPTIONS AND METHODOLOGY**

### **80% OF TANDEM REVENUE REQUIREMENT**

In the CC Docket No. 91-213 Report and Order released on October 16, 1992 (¶ 25), the FCC stated: "In order to ease the impact of rate structure change on small IXCs, however, we prescribe that the tandem element initially recover only twenty percent of the current tandem revenue requirement, with the remainder of the revenue requirement recovered through the interconnection charge, and find that such a rate is just and reasonable."

The BellSouth Part 69 revenue requirement for tandem was developed from 1995 ARMIS 43-04 data. The Part 69 tandem revenue requirement less CCS/STP was multiplied by 80% to identify the portion included in the TIC. This resulted in a revenue requirement of \$55,710,080.

### **CCS/STP COSTS ALLOCATED TO TANDEM SWITCHING**

A portion of CCS costs are booked to Category 2 tandem switching. The FCC ordered in CC Docket No. 91-213 that 80% of these costs be recovered in the TIC.

The CCS/STP investment (subject to separations) was identified using Equipment Category Numbers (ECN) from the Central Office Monthly Allocation Process (COMAP). The CCS/STP investments represent amounts from 6/96 annualized. A ratio of CCS/STP investments to total Category 2 investment was calculated and used to split the Part 69 tandem revenue requirement into tandem and CCS/STP. The CCS/STP revenue requirement was multiplied by 80% to identify the amount included in the TIC.

The number of signaling links between the SSPs and STPs and between STP pairs were identified from engineering records. A ratio of these links to the total number of links was developed and applied to total link investment to split out the cost of these specific signaling links. This cost was used to develop a CCS link revenue requirement and was added to the CCS/STP revenue requirement.

This resulted in a revenue requirement of \$1,369,920.

### **HOST/REMOTE CONFIGURATIONS**

For service to a remote switch, a tandem fixed and per mile/per MOU charge applies for transport between the host and remote. These revenues are much less than the Part 69 revenue requirement, and the difference is included in the TIC.

Using unique identifiers in the CABS billing data, the July 1996 monthly revenue for the host to remote transport was identified. The annual revenue was estimated by multiplying the monthly value by twelve. In Part 36 and Part 69, host/remote circuit equipment and related cable and wire facilities have their own category, and are therefore easily identified for revenue requirement purposes. 1995 ARMIS data were used to develop a Part 69 host/remote revenue requirement.

The resulting revenue requirement was \$4,752,709.

## **REDEFINED TANDEM SWITCHED TRANSPORT**

### **DTT to Tandem**

Two tariff options are available for tandem switched transport. The first option provides tandem transport from the Serving Wire Center (SWC) to the End Office (EO) and is billed on a MOU basis with mileage measured from the SWC to the EO. The second option is called Direct Trunked Transport (DTT) to the Tandem and it consists of a combination of monthly flat-rated charges and MOU charges. The SWC to tandem facilities are dedicated to each customer, and the charges are flat-rated monthly charges for DS1 and DS3 channel mileage, with mileage measured from the SWC to the tandem. The facilities between the tandem and end office are shared by many customers and are charged on a MOU basis, with the mileage measured between the tandem and the EO. Under either option, the facilities between the SWC and the tandem are dedicated to individual customers and should be recovered through flat-rated monthly charges. Option 1 should be eliminated.

The CLLI codes of all tandem routed trunks and their corresponding POP SWCs were retrieved from the July 1996 CABS billing data. In addition, the trunk USOC (TPPxx) was used to determine trunk capacity - DS3 or DS1. The mileage between each tandem and its POP SWC was calculated using V&H coordinates obtained from the NECA #4 Tariff. In the same manner, mileage between each tandem and its subtending EO was calculated. Using current switched transport rates and demand from the July 1996 CABS billing data, tandem transport revenue was calculated using the DTT structure - dedicated transport between tandem and POP SWC; tandem transport between tandem and EO. The revenue impact was estimated to be the difference in the revenue calculated under the DTT structure and the July 1996 billed tandem transport revenue.

### **Tandem Rate Calculation**

Tandem switched transport rates were established based on formulas that do not include all costs for tandem transport. For the tandem fixed rate element, the FCC prescribed rate methodology does not include enough DS3/1 multiplexers. For both tandem fixed and per mile, the average MOU/trunk amounts were overstated. The lack of sufficient multiplexers and overstated MOU/trunk assumptions contribute to tandem transport rates that are too low. This amount is in the TIC.

The tandem transport per minute rate was adjusted to account for one additional DS3/1 multiplexer (mux). Thus, a total of two multiplexers were included in the adjusted tandem transport per minute rate. This correctly reflects the multiplexing costs at the tandem and end office. The rate adjustment was arrived at by developing fixed interoffice rates and a DS3/1 channelization rate that included two (rather than one) DS3/1 multiplexers. The developed rates were weighted based on the copper/fiber mix reported in the ARMIS 43-07 Report. The adjusted tandem transport per MOU rate was calculated by dividing the voice grade equivalent of the DS3 and DS1 weighted facility rates by 9,000 MOU/trunk. The revenue impact was estimated by multiplying the 1995 tandem transport facility termination demand (from the 1996 Annual Interstate Access Tariff Filing) by the percent difference in the one-mux tandem transport per minute rate and the two-mux tandem transport per minute rate.

In order to quantify the overstatement of the MOU/trunk assumption, the average minutes of use per tandem-routed trunks were determined by dividing the billed tandem minutes by the tandem routed trunks from the 1995 CABS billing data.

The combined revenue impact of the additional DS3/1 mux, the additional DTT mileage and the derived MOU/trunk ratio was estimated as follows:

- The following sum was calculated (call result Value A): Tandem switched transport revenue based on 9,000 MOU/trunk + revenue generated by additional DS3/1 mux + revenue generated by additional DTT mileage
- Value A was multiplied by the derived MOU/trunk ratio (call result Value B)
- The estimated revenue impact was calculated as Value B minus Value A.

The total revenue impact for the DTT to tandem and the tandem rate calculation described above was \$49,162,168.

### **ANALOG END OFFICE TRUNK SWITCH PORTS**

When a trunk is established to an analog switch, a combination trunk unit-DS1/VG multiplexer is used to terminate DS1s on the switch. The costs of these

units are accounted for as circuit equipment, and through the Part 36 separations and Part 69 allocation processes, are allocated to switched transport. These units are not used for special access services, but the switched transport rates are equal to the special access rates for direct trunked transport (DTT) and are based on special access rates for tandem transport, but the cost for the switched trunk unit is not recovered through existing switched rates. However, in special access the DS1 basic channelization system with central office channel voice interfaces provide similar functions.

The monthly charges for one (1) DS1 basic channelization system and twenty-four (24) voice grade interfaces were determined from the tariff. This combined charge was divided by twenty-four to develop the monthly rate per DS0 for channelization. The quantity of trunk terminations in each BellSouth central office was determined by counting the number of TPPXX USOC's in the July 1996 CABS billing data. From the list of trunks (by central office) and the list of analog central offices, the total quantity of analog office trunk terminations was determined. Multiplying the channelization rate per DS0 by the quantity of analog office trunk terminations yield the monthly revenue that should be recovered for the analog trunk unit.

The resulting impact on the TIC was \$6,334,008.

### **COE MAINTENANCE MISALLOCATIONS**

Part 36.321(a) states that expenses related to Central Office Equipment are summarized in the following accounts:

Central Office Switching Expense	Account 6210
Operator Systems Expense	Account 6220
Central Office Transmission Expense	Account 6230

Additionally, Part 36.321(b) states that the expenses in these accounts are apportioned among the operations on the basis of the separation of investments in Central Office Equipment (COE) Accounts 2210, 2220 and 2230, combined. By separating the expenses on the combined COE, a mismatch occurs to the extent the expenses associated with maintaining the investment are apportioned differently than the investment being maintained.

Also, Part 69.401(b) states that COE Switching, COE Operator Systems and COE Transmission (Accounts 6210, 6220 and 6230) shall be apportioned among the interexchange category and access elements on the basis of the apportionment of the total COE investment. This results in a portion of COE maintenance expense for local and operator switches being allocated to Common Line, Transport and Special Access, where there is no switching investment to maintain. This non-

specific approach to the assignment of these expenses has resulted in a net over assignment of expenses to the TIC.

Rather than using total COE investment for the apportionment, it is more appropriate to apportion these expenses based on their related investments. For example, COE Switching Expense, Account 6210, should be apportioned based on the related COE Switching Investment, Account 2210.

1995 ARMIS 43-04 data was used to calculate the Part 36 and Part 69 revenue requirement impact of assigning these expenses based on the specific assets being maintained. This resulted in a revenue requirement of \$15,052,000.

### **CENTRAL OFFICE TERMINATION COUNTS**

FCC Part 36.126(e)(3)(i) states that Category 4.23 Interexchange Circuit Equipment costs will be assigned to categories, and thus to jurisdictions, based on the average cost per termination.

However, it is possible to directly identify in the Central Office Equipment (CES) study the costs by jurisdiction that are associated with private line services and those message services that are not multi-jurisdictional (joint) in nature. The distribution of costs to categories and jurisdiction is different when direct identification rather than cost per termination are used to assign Category 4.23 costs.

The monthly Central Office Equipment study for August, 1996 was revised to permit direct identification of interexchange costs by category (Private Line, Message-State, Message-Interstate, and Message-Joint) and jurisdiction (Interstate and State).

The results were annualized and resulted in a reduction in revenue requirement of \$84,678,084.

### **TRANSPORT AVERAGING, COST ALLOCATIONS AND COST RECOVERY**

The local transport equal charge rates, prior to price caps and the transport restructure, were derived from a "revenue requirement" which was the result of FCC mandated rules for the allocation of investments and expenses. This mandated cost allocation process predominantly utilized general categorizing and averaging of costs to a great extent-averaging across technologies, geographical areas (e.g., rural, suburban, urban), services and jurisdictions. The key drivers in the process were plant investments, with expenses generally following the allocation of the plant. Because there were basically only two rate elements for switched local transport, the per minute termination charge and the per minute-



mile facility charge, the rates could deviate very little, if any, from the rate levels resulting from the cost allocation rules.

Special access rates, on the other hand, while adjusted to equal a total special access revenue requirement, were more heavily based on a unit investment approach which more specifically identified the actual plant used for each service. The unit investments were then used as a basis for loading appropriate overheads. In addition, under the cost allocation process, High Cap facilities could be directly identified and assigned to the special access revenue requirement category.

Once rates were set under price cap rules, beginning in 1991, the direct link to revenue requirements was broken, but the price cap baskets and banding limitations allowed relatively little annual deviation from original rate-of-return rate levels and rate relationships. The transport restructure was implemented at the very beginning of 1994 and was based on 1993 rates and 1992 demand. The transport restructure repriced switched transport services based on special access High Cap rates. To a great extent, the TIC, which was the resulting difference in revenues between the two pricing schemes, represented the difference in costing methods between the two services - the local transport rates based predominantly on cost allocation rules that overassigned costs to local transport and the High Cap rates based more on a direct identification of costs. Much of the TIC, therefore, represents the averaging of costs across technologies, geographies, and jurisdictions (state and interstate) that were inherent in the cost allocation rules that determined the equal charge rates.

A direct identification of local transport costs would result in fewer costs than those produced by cost allocation rules. For example, in the cost allocation process, the first step is the combination of plant accounts which are then categorized into three general plant categories - exchange loop, exchange trunk and interexchange trunk. These categories are then subcategorized into message and private line for jurisdictional separations purposes. Although the detail is available at the subaccount level prior to categorization, this detail is lost in the subsequent categorization and separations processes. A detailed analysis utilizing a direct cost approach demonstrates that the cost allocation rules assign more investment to local transport than are actually utilized in provision of the service. The difference in costs is currently in the TIC, even though these costs are actually incurred to provide local services, state services, and/or interstate services other than local transport.

An additional component of the TIC can also be identified. Circuit equipment and cable and wire facilities serving longer haul traffic have an embedded Part 36 cost that is many times the cost developed by using the special access costing methodology. The cost of hauling traffic to scattered local dial switches in remotely populated area is several times more than the cost of hauling an equivalent unit of traffic in the larger cities at special access rates. This cost